

WHAT IS CLAIMED IS:

1. A gear-type automatic transmission having a plurality of gear trains between its input shaft and output shaft and capable of changing the revolutions of said input shaft and output shaft by repeating selective and automatic engagement and disengagement of said gear trains, wherein the gear-type automatic transmission further has a clutch that temporarily transmits the torque of the input shaft and output shaft when shifting one of the gear trains to another gear train.
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2. A gear-type automatic transmission as set forth in Claim 1 above, wherein the torque capacity of said clutch is greater than the maximum output shaft torque of said entire transmission.
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3. A gear-type automatic transmission as set forth in Claim 1 above, wherein said clutch is a multi-disc clutch provided in the gear train smallest of all said gear trains in terms of reduction gear ratio.
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4. A gear-type automatic transmission as set forth in Claim 1 above, wherein said clutch is a multi-disc clutch provided in the gear train smallest of all said gear trains
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in terms of reduction gear ratio and there is further provided, in addition to said multi-disc clutch, a starting clutch for engaging and disengaging the gears that transmit the torque of the input shaft and output shaft of said 5 gear-type automatic transmission when the vehicle is started.

5. A gear-type automatic transmission as set forth in Claim 4 above, wherein, if a means for automatically 10 selecting said gear trains becomes inoperative, said starting clutch will be disengaged after the starting clutch has been engaged and said multi-disc clutch engaged halfway.

15 6. A gear-type automatic transmission as set forth in Claim 3 above, wherein the torque capacity of said multi-disc clutch is greater than the output shaft torque of said transmission that occurs before a shift is started.

20 7. A gear-type automatic transmission as set forth in Claim 3 above, wherein the torque capacity of said multi-disc clutch is greater than the output shaft torque of said transmission that occurs after a shift has been started.

8. A gear-type automatic transmission as set forth in Claim 3 above, wherein the throttle valve angle of the engine is controlled in case of trouble with the oil pressure supply for driving said multi-disc clutch.